

Name: _____

p1029: Combine Like Terms (v6)

Example

Combine like terms.

$$x + 4x^2 + 5x^2 - 2 - 6x + 3 - 7 - x^2 - 8x + 9$$

Answer

Combine the quadratic terms.

$$4x^2 + 5x^2 - x^2 \equiv 8x^2$$

Combine the linear terms.

$$x - 6x - 8x \equiv -13x$$

Combine the constant terms.

$$-2 + 3 - 7 + 9 \equiv 3$$

The final result:

$$8x^2 - 13x + 3$$

Question 1

Combine like terms.

$$x - 3x^2 - 8x^2 - 1 + 7 - 6x - 7x^2 + 8 + 9x + 5x^2$$

$$-13x^2 + 4x + 14$$

Question 2

Combine like terms.

$$9 + 5x^2 - 8 + 7x + 3x^2 - 5x^2 - 2 - 4x + x - 3x$$

$$3x^2 + x - 1$$

Question 3

Combine like terms.

$$-6x + 9x^2 + 7 + 8x + 3x + 2x^2 + 6x^2 - 1 + 5 - 9x$$

$$17x^2 - 4x + 11$$

Question 4

Combine like terms.

$$9x^2 - x^2 + 2 - 2x^2 + 5x + 6x + 3 - 7x + 1 - 9$$

$$6x^2 + 4x - 3$$